

ABSTRACT OF THE DISCLOSURE

A permanent magnet for a motor has magnetic domains magnetized in a radial direction and arranged at regular intervals in a circumferential direction. A thickness t in the radial direction of the permanent magnet satisfies the relation of $t \leq \pi D / (NM - \pi)$, where D represents an inner diameter of the permanent magnet having a value of 20 mm or less, N represents the number of the magnetic domains, and M represents the number of alternating current phases for driving the motor.